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U 2 General

TO: U-2 Detachment Personnel

FROM: C. L. Johnson

SUBJECT: PRESSURIZATION

The recent problems regarding cabin pressurization have caused considerable consternation in many quarters, and after reviewing the failures and discrepancies we feel that they are no different than they have been in the past.

Although we have limited service experience at IRAN and you people in the field have considerably more service type experience, I nonetheless investigated our ground and flight test procedures for cabin pressurization. Most of the following will be old hat to you; however, I pass it along in review.

Probably the most significant item which can be done to prevent flight squawks before they occur is to conduct periodic checks on the leakage of the cabin/Q-bay system and on the seal pressurization system. With the advent of 150 hr. inspection in lieu of 100 hrs., this inspection becomes all the more necessary. In the past, old hands recall specialized requirements for canopy pressurization every 25 hrs. In this regard, it would be most desirable to run cabin/Q-bay leakage and seal pressurization checks every 30 hrs. when the airplanes are TDY on critical mission unless flight squawks dictate other requirements.

At IRAN when system leakage occurs, these are some of the places where we have had difficulties:

1. 618T-3 transceiver and tuner box lids.
2. Bulkhead 319 coaxial cable rubber seals.

- Q-bay bulkhead cable seals (rubber).
- 4. Transceiver hoses.
- 5. System IX lines

Of the above, items 3 and 4 deteriorate with service life moreso than others and require frequent inspection. Particular attention must be made to the canopy and Q-bay seals and their condition as a preflight item.

Once the leakage is within tolerances specified in M. M. -2-3 and if a flight squawk still persists, the normal seal pressurization and aux. seal pressurization systems receive maximum attention.

There are times when using the ground test cart the leakage rates are within limits and no physical leaks can be found, yet the squawk persists. In this case, the bulkhead pressure regulator and on remote occasions the emergency safety valve has taken care of the situation because they have been bleeding excessive air.

I hope the above will be helpful to you, and I know your continuing effort on maintaining these aircraft will make them stand out with respect to availability and reliability.


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